

**Air Quality and Surface Water Quality
Monitoring Project for Union County
South Dakota Department of Environment and Natural
Resources**

Commission Meeting October 21, 2008

- I. Staff Introduction

- II. Air quality testing in Union County
 - a. Air quality monitoring plan
 - b. Site UC1 location and testing parameters
 - c. Site UC2 location and testing parameters
 - d. Site UC3 location and testing parameters
 - e. Questions
 - f. Contact: Brad Schultz, Air Quality Program, 605-773-6038

- III. Surface water quality testing in Union County
 - a. Surface water quality sampling sites at 6 locations.
 - b. Testing parameters: Dissolved oxygen, pH, water temperature, nutrients, ions, metals, total petroleum hydrocarbons, and volatile organic compounds.
 - c. Questions
 - d. Contact: Pat Snyder, Surface Water Quality Program, 605-773-3351

Air and Water Quality Monitoring

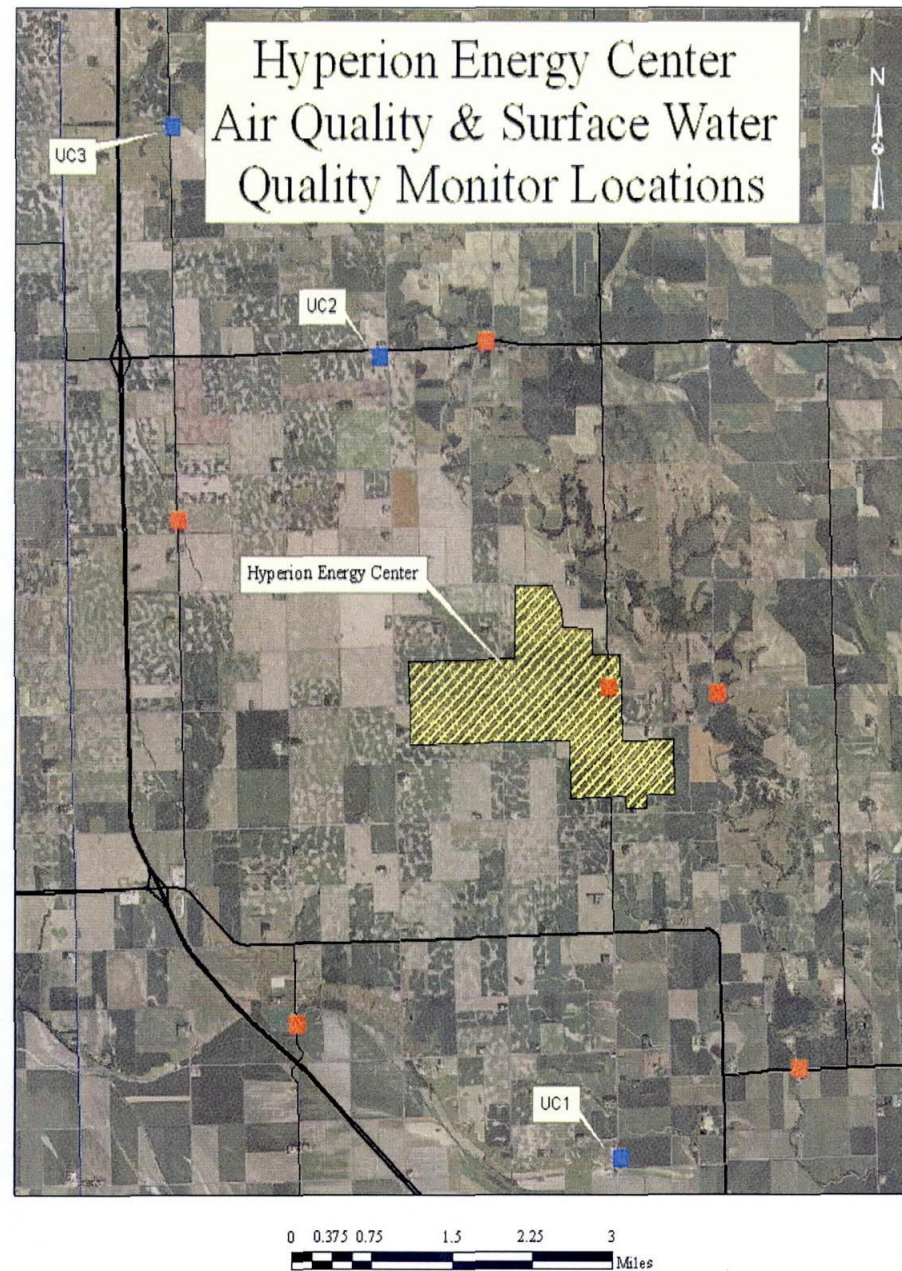
Union County



Project Goals

- Establish Background Levels
- Determine Construction Impacts
- Determine Facility Impacts
- Long Term Trends





UC #1

Testing Parameters

Particulate Matter PM10 and PM2.5

Sulfur Dioxide

Nitrogen Dioxide

Carbon Monoxide

Air Toxics

Meteorological Conditions



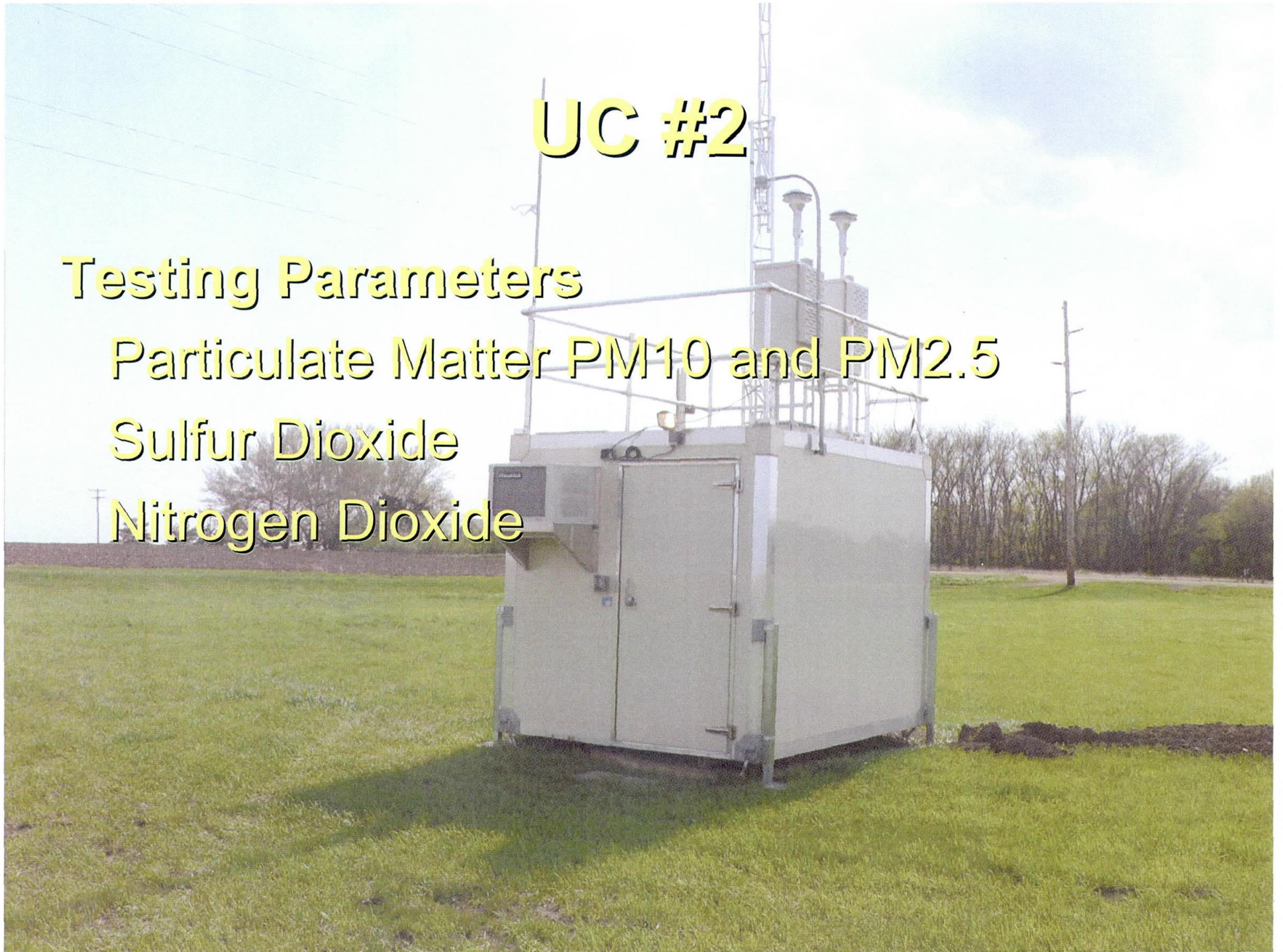
UC #2

Testing Parameters

Particulate Matter PM10 and PM2.5

Sulfur Dioxide

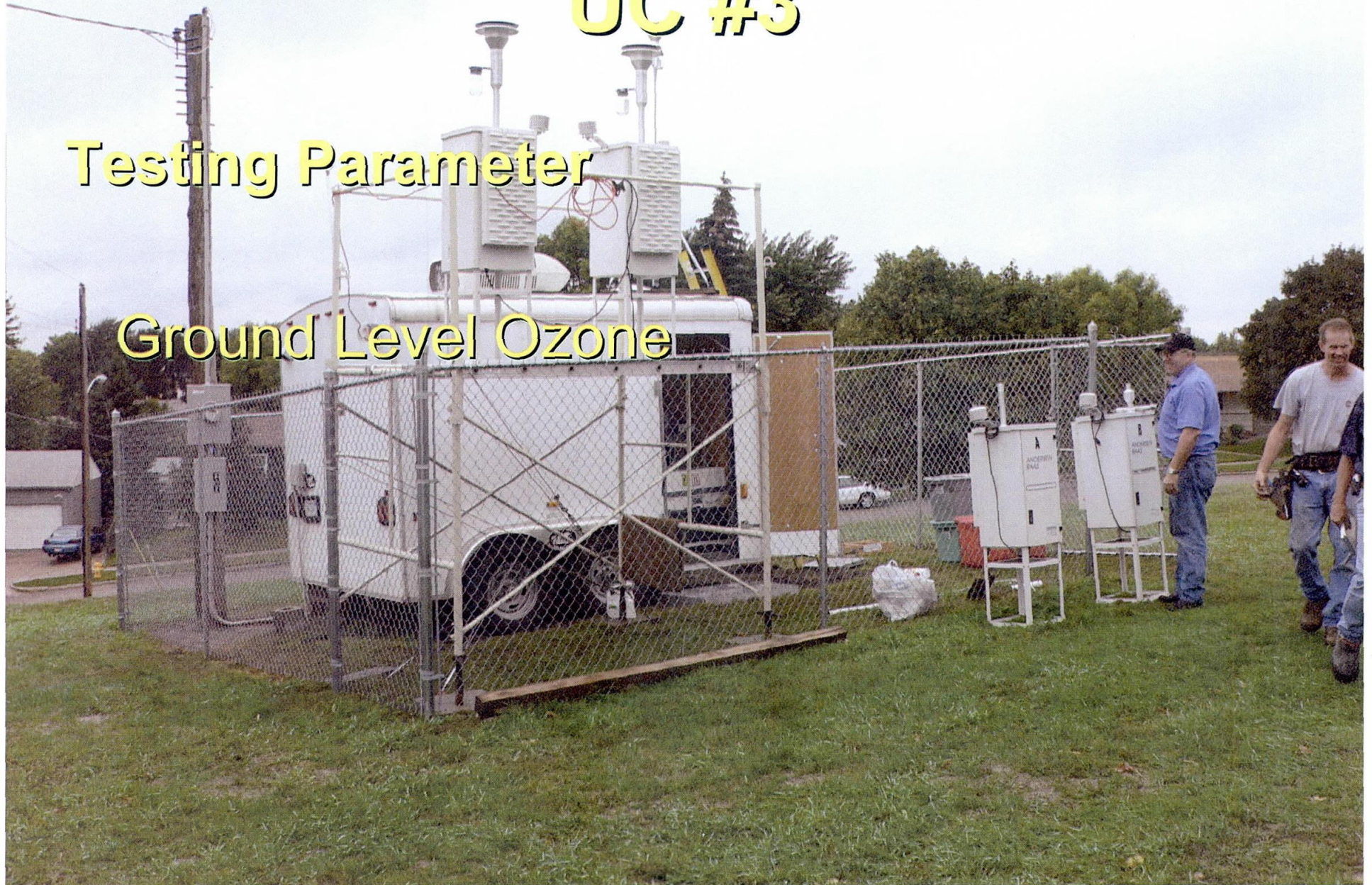
Nitrogen Dioxide

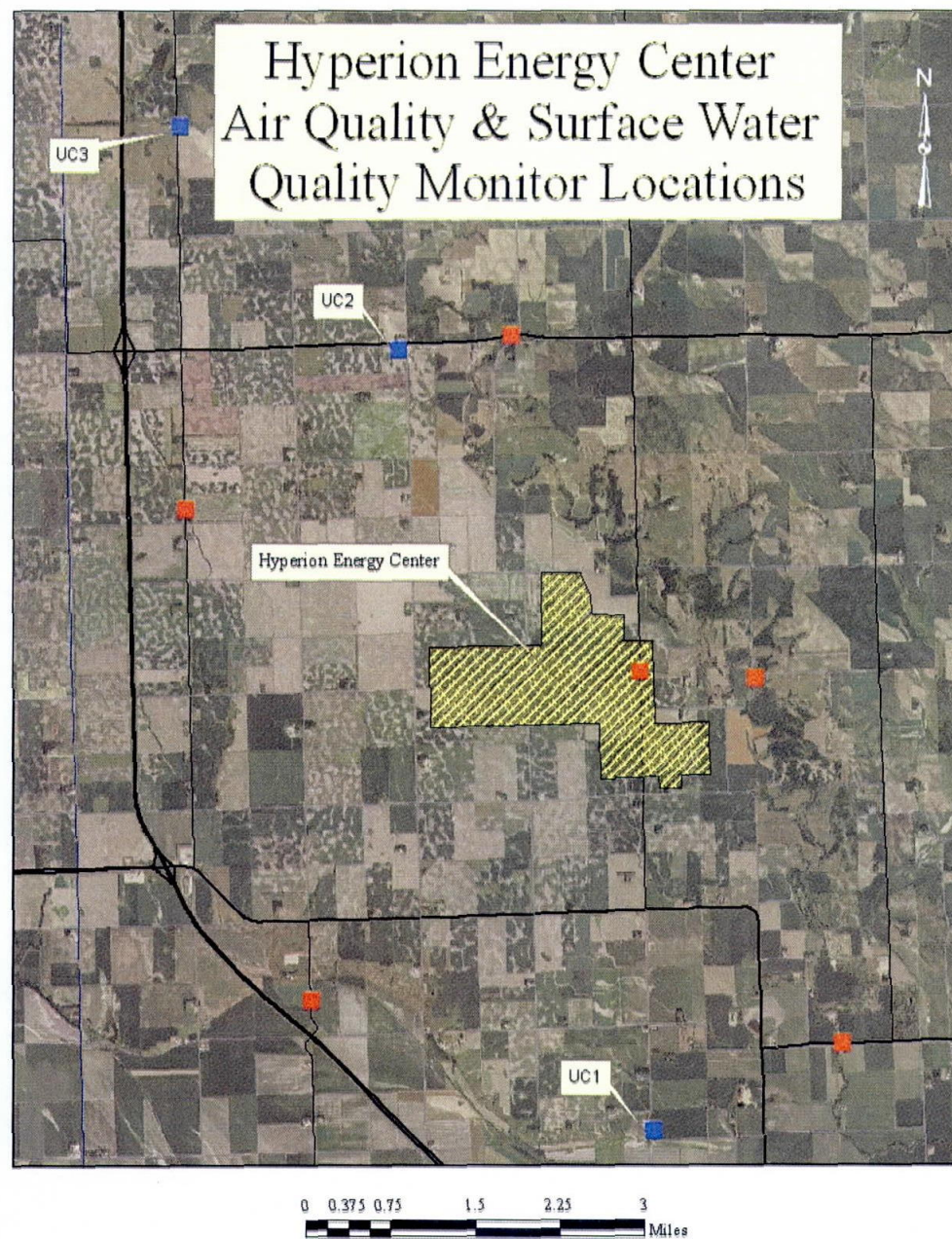


UC #3

Testing Parameter

Ground Level Ozone





Water Quality Monitoring

- Six sampling sites sampled on a quarterly basis
- Testing parameters –
 - Dissolved oxygen
 - pH
 - Water Temperature
 - Nutrients
 - Ions
 - Metals
 - Total Petroleum Hydrocarbons
 - Volatile Organic Compounds

Air and Water Quality Monitoring

Contacts:

Air Quality

Brad Schultz (605) 773-6038

Water Quality

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